



OVERVIEW OF LIFESTYLE MEDICINE

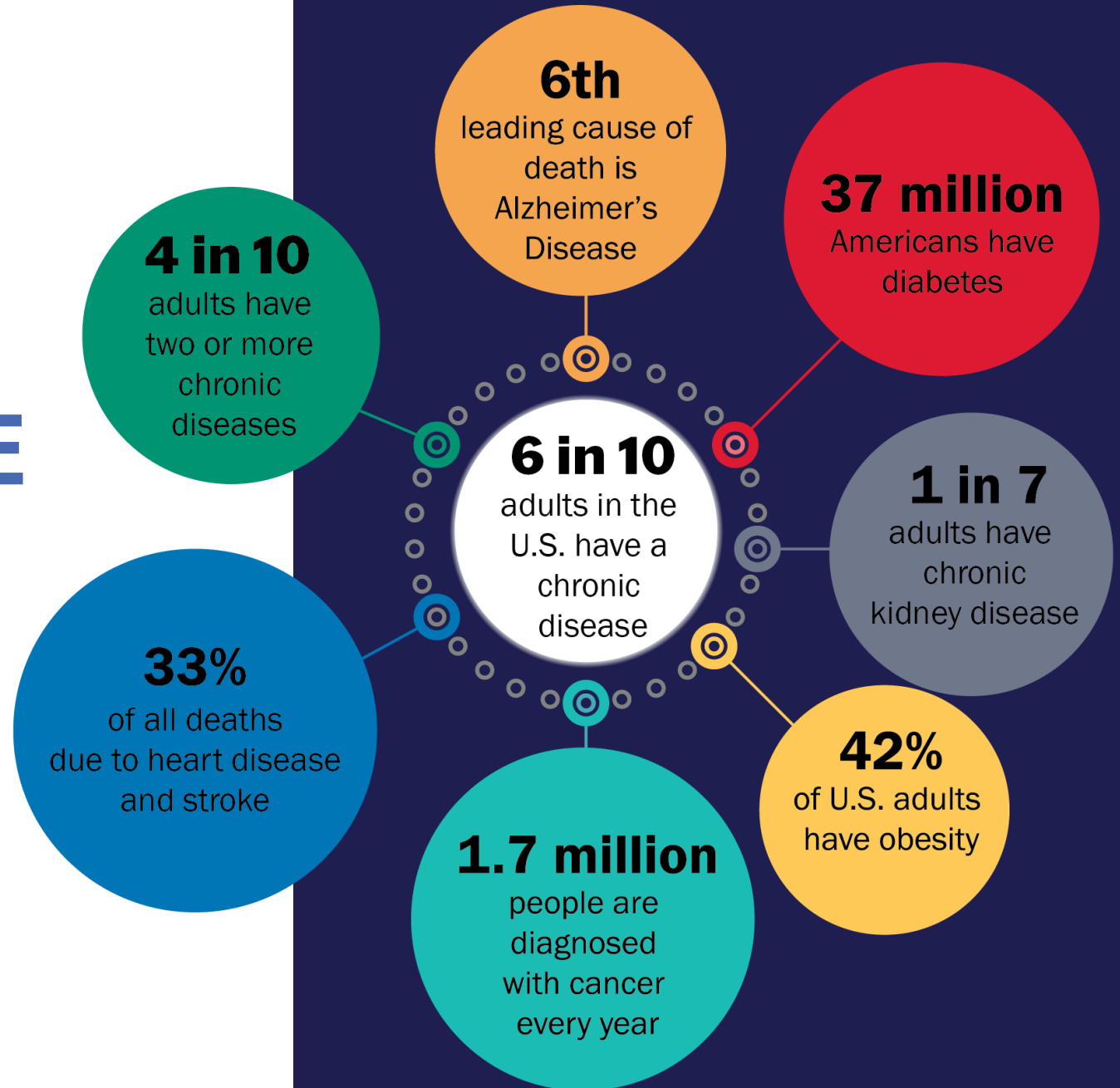
Jill Davis, MS, DipACLM, CPT



DISCLOSURES

- No conflicts of interest to mention
- No financial benefit

CHRONIC DISEASE PREVALENCE AT AN ALL-TIME HIGH



CAUSES OF CHRONIC DISEASE



Many chronic diseases are driven by unhealthy lifestyle practices, predominantly:

- Tobacco use and exposure to secondhand smoke
- Poor nutrition, including diets low in fruits and vegetables and high in sodium and saturated fats
- Physical inactivity
- Excessive alcohol use



VERY FEW AMERICANS LEAD A HEALTHY LIFESTYLE

A 2016 analysis using 2003-2006 NHANES data (n=4,745 adults) **found only 2.7% of individuals had a “healthy lifestyle,”** defined by:

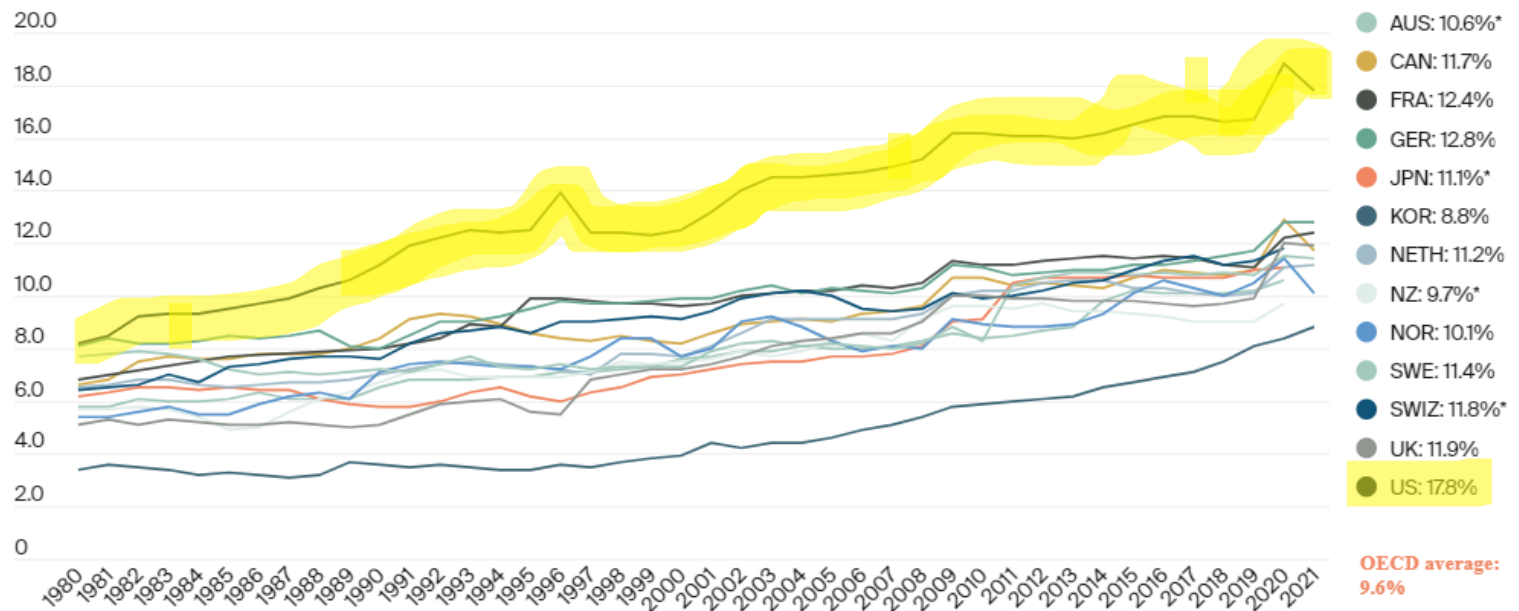
1. Moderate or vigorous exercise for at least 150 minutes a week
2. A diet score in the top 40% on the Healthy Eating Index
3. A body fat percentage under 20% (for men) or 30% (for women)
4. Not smoking

(In 1988-1994 NHANES data, 6.8% of Americans engaged in four similar healthy lifestyle behaviors)

U.S. HAS THE HIGHEST RATE OF AVOIDABLE DEATHS OF ANY OECD COUNTRY

The U.S. is a world outlier when it comes to health care spending.

Percent of GDP spent on health, 1980–2021*



Download data

Notes: * 2020 data. Current expenditures on health for all functions by all providers for all financing schemes. Data points reflect share of gross domestic product. Based on System of Health Accounts methodology, with some differences between country methodologies. GDP = gross domestic product. OECD average reflects the average of 38 OECD member countries, including ones not shown here.

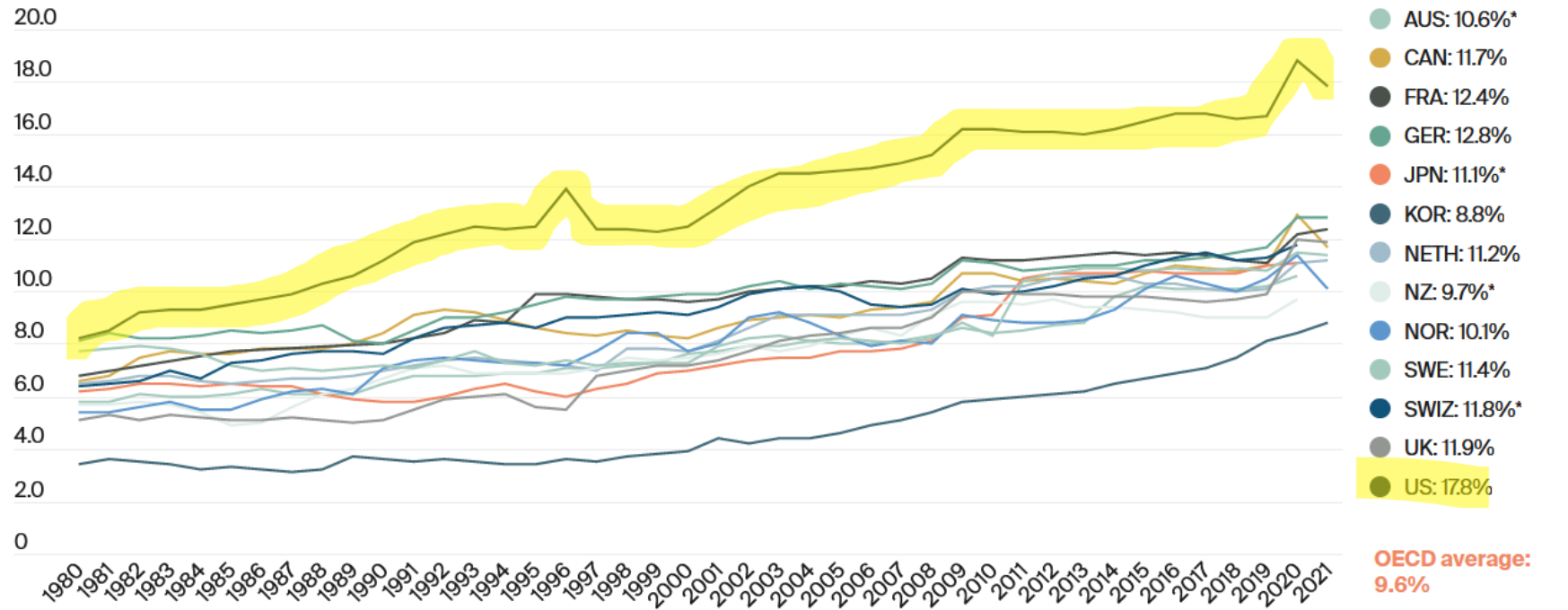
Data: OECD Health Statistics 2022.

Source: Munira Z. Gunja, Evan D. Gumas, and Reginald D. Williams II, *U.S. Health Care from a Global Perspective, 2022: Accelerating Spending, Worsening Outcomes* (Commonwealth Fund, Jan. 2023). <https://doi.org/10.26099/8ejy-yc74>

U.S. HAS THE HIGHEST RATE OF HEALTH-CARE SPENDING OF ANY OECD COUNTRY

The U.S. is a world outlier when it comes to health care spending.

Percent of GDP spent on health, 1980–2021*



NATIONAL COST OF CHRONIC AND MENTAL HEALTH CONDITIONS

90% of the nation's
\$4.4 trillion⁽²⁰²³⁾ annual
healthcare expenditures
address chronic physical
and mental health
conditions

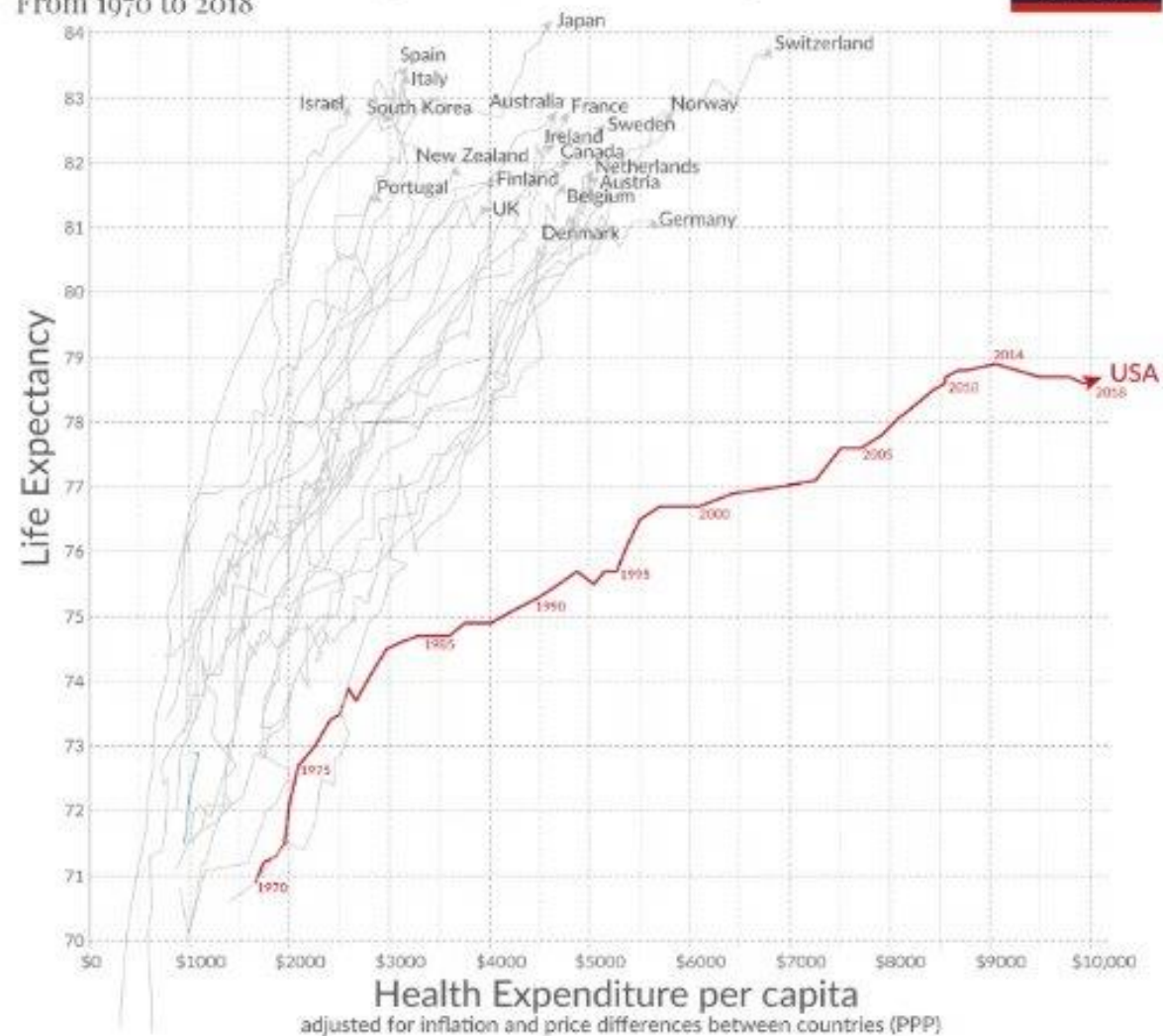
IN BILLIONS



Life expectancy vs. health expenditure

From 1970 to 2018

Our World
in Data



Data source: OECD — Note: Health spending measures the consumption of health care goods and services, including personal health care (curative care, rehabilitative care, long-term care, ancillary services, and medical goods) and collective services (prevention and public health services as well as health administration), but excluding spending on investments. Shown is total health expenditure (financed by public and private sources). Licensed under CC-BY by the author Max Roser.

OurWorldinData.org — Research and data to make progress against the world's largest problems.





AMERICAN COLLEGE OF
Lifestyle Medicine

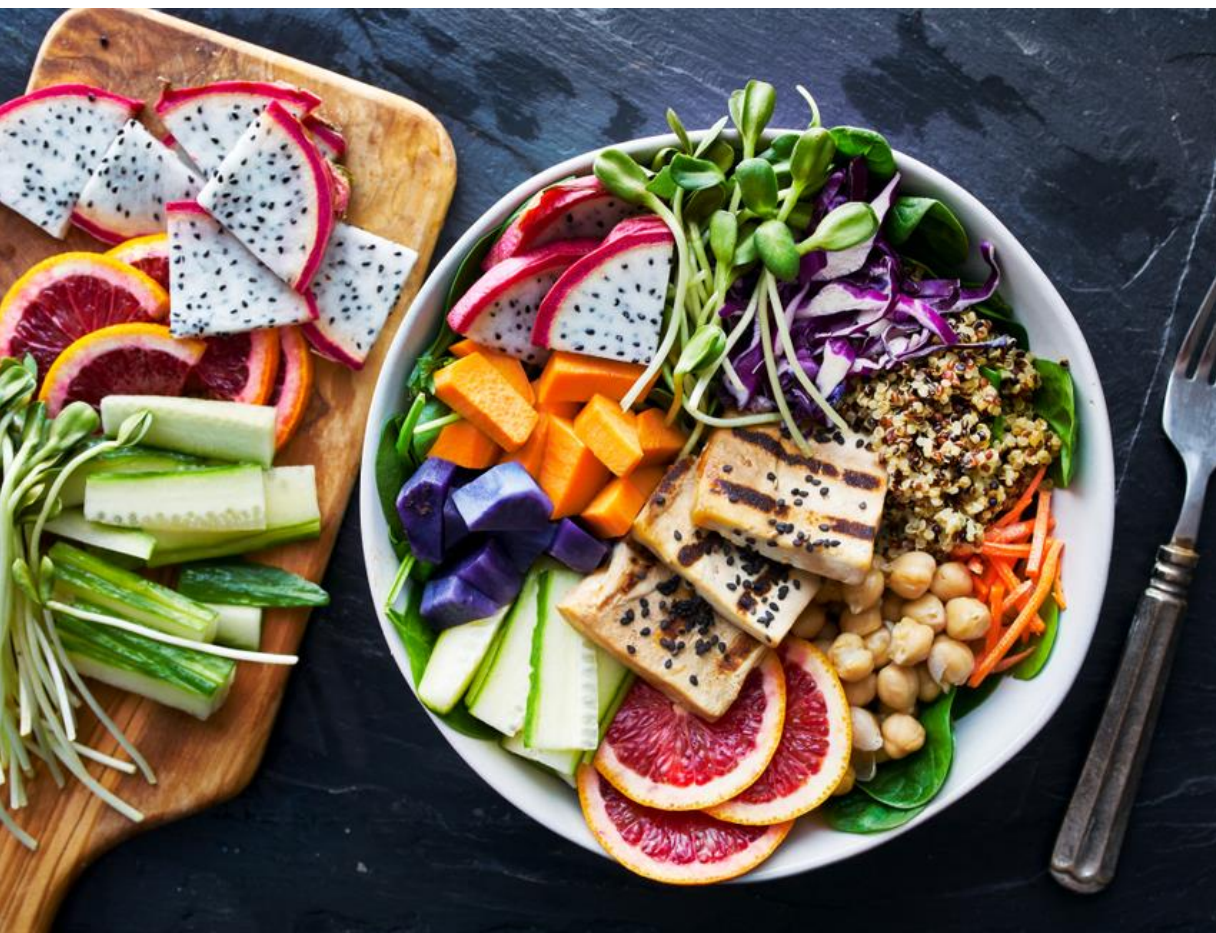
**WHAT CAN WE
DO ABOUT
THIS?**

LIFESTYLE MEDICINE IS THE SOLUTION

6 KEY DOMAINS OF HEALTH BEHAVIOR:

- Nutrition
- Physical activity
- Restorative Sleep
- Stress management
- Social connection
- Avoiding risky substances





NUTRITION

Extensive scientific evidence supports a whole food, predominantly plant-based diet as an important strategy in preventing chronic disease, treating chronic conditions, and, in intensive therapeutic doses, reversing chronic illness. Such a diet is nutrient-dense, rich in fiber and antioxidants, with a variety of minimally processed vegetables, fruits, whole grains, legumes, nuts, and seeds.



REVIEW AND SYNTHESIS OF 78 CLINICAL PRACTICE GUIDELINES FOR COMMONALITIES

Included studies

- 78 clinical practice guidelines published between 2010 and 2021 that address nutrition for a variety of health conditions, as well as general health promotion, were included in this study.
 - 83% major medical professional societies.
 - 12% governments.
 - 5% large health stakeholder associations

Recommendations for:

- Overall dietary patterns
- Major food groups
- Food components frequently addressed in research and clinical settings, such as salt, saturated fat, protein, sugar, etc.



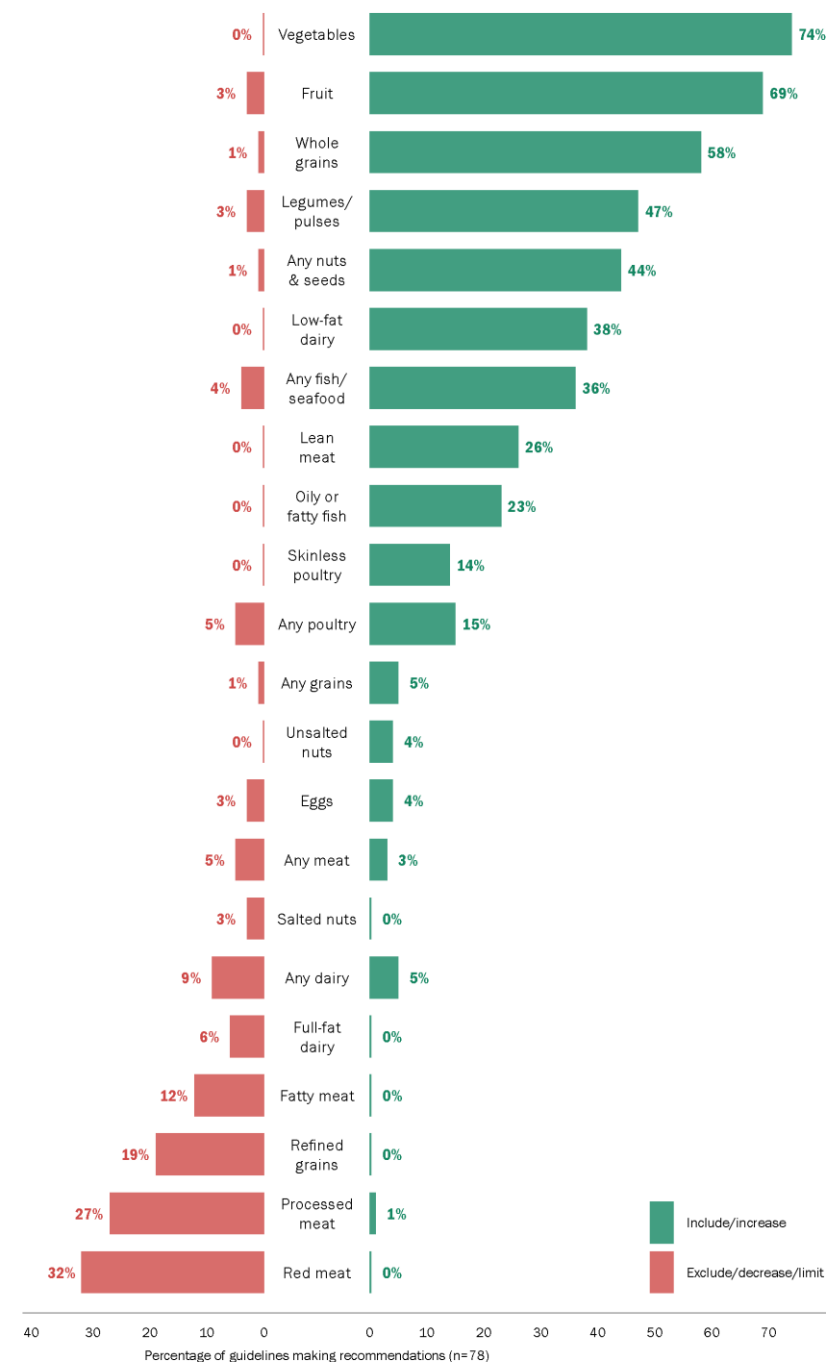
RESULTS

Top Encouraged Food Groups

- Vegetables (74%)
- Fruit (69%)
- Whole grains (58%)
- Legumes (47%)
- Any nuts and seeds (44%)
- Low-fat dairy (38%)
- Any fish/seafood (36%)

Most Discouraged Food Groups

- Fatty meat (12%)
- Refined grains (19%)
- Processed meat (27%)
- Red meat (32%)



PHYSICAL ACTIVITY

Regular and consistent physical activity combats the negative effects of sedentary behavior. Engaging in general physical activity and purposeful exercise weekly builds mental health, overall health, and resiliency.



RESTORATIVE SLEEP

Inadequate sleep causes sluggishness, low attention span, decreased sociability, depressed mood, decreased daytime caloric burn, increased hunger, decreased satiety, insulin resistance, and decreased performance. 7-9 hours nightly is associated with optimal health; under six hours or more than nine hours is associated with increased mortality.



STRESS MANAGEMENT

Stress, when appropriate, may improve health and productivity, but in excess, it can lead to anxiety, depression, obesity, immune dysfunction, and more. Helping patients recognize negative stress responses and identify coping mechanisms and stress reduction techniques leads to improved well-being.



AVOIDANCE OF RISKY SUBSTANCES

Tobacco and excessive alcohol consumption increase the risk of chronic diseases and death, with a similar impact from opioids and recreational drug use. Treatments take time, requiring varying approaches and many attempts, with patience and support essential to cease risky substance habits.



SOCIAL CONNECTION

Positive social connections and relationships affect physical, mental, and emotional health. Leveraging the power of relationships and social networks can help reinforce healthy behaviors.



AT THE CENTER OF MEDICINE, SCIENCE, AND HEALTH



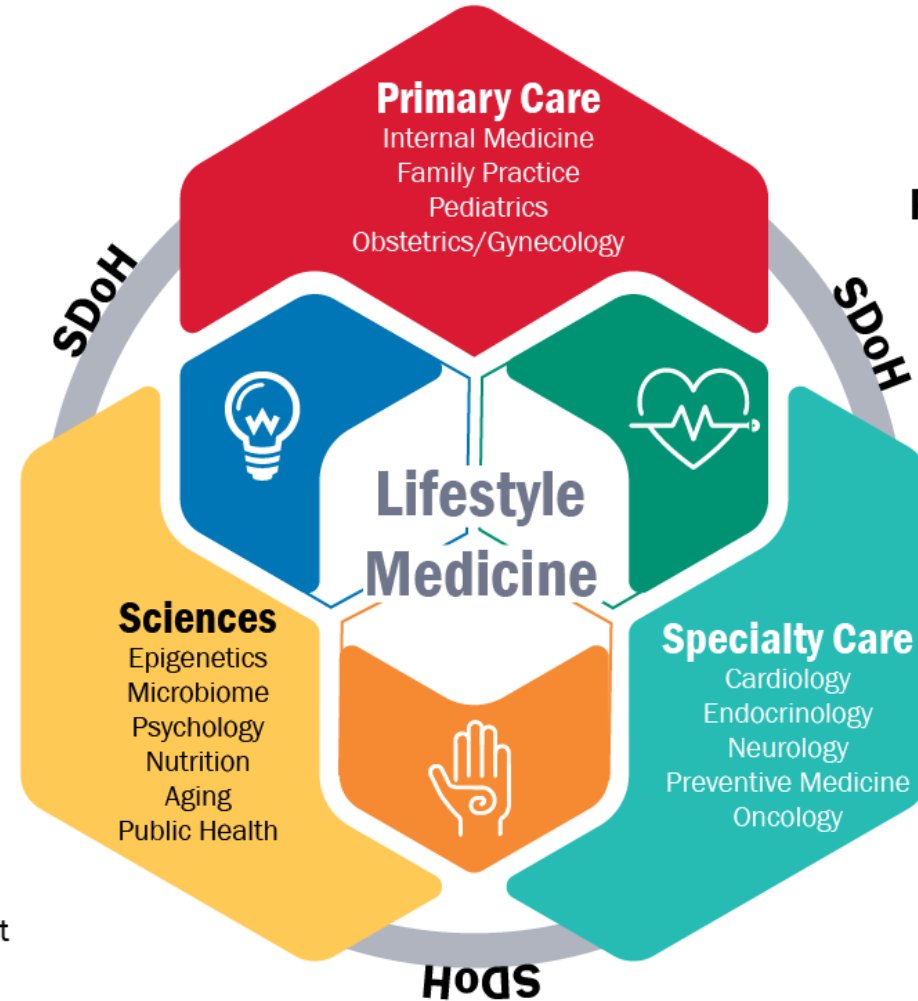
Mental Health

Inner balance and harmony to optimally meet daily demands / tasks / relationships



Social Determinants of Health (SDoH)

Economic Stability
Education Attainment
Health Care Access
Built Environment
Social Context



Physical Health

Proper bodily function affected by lifestyle, genetics, and one's environment



Social Health

Personal ability to interact and adapt effectively with the environment



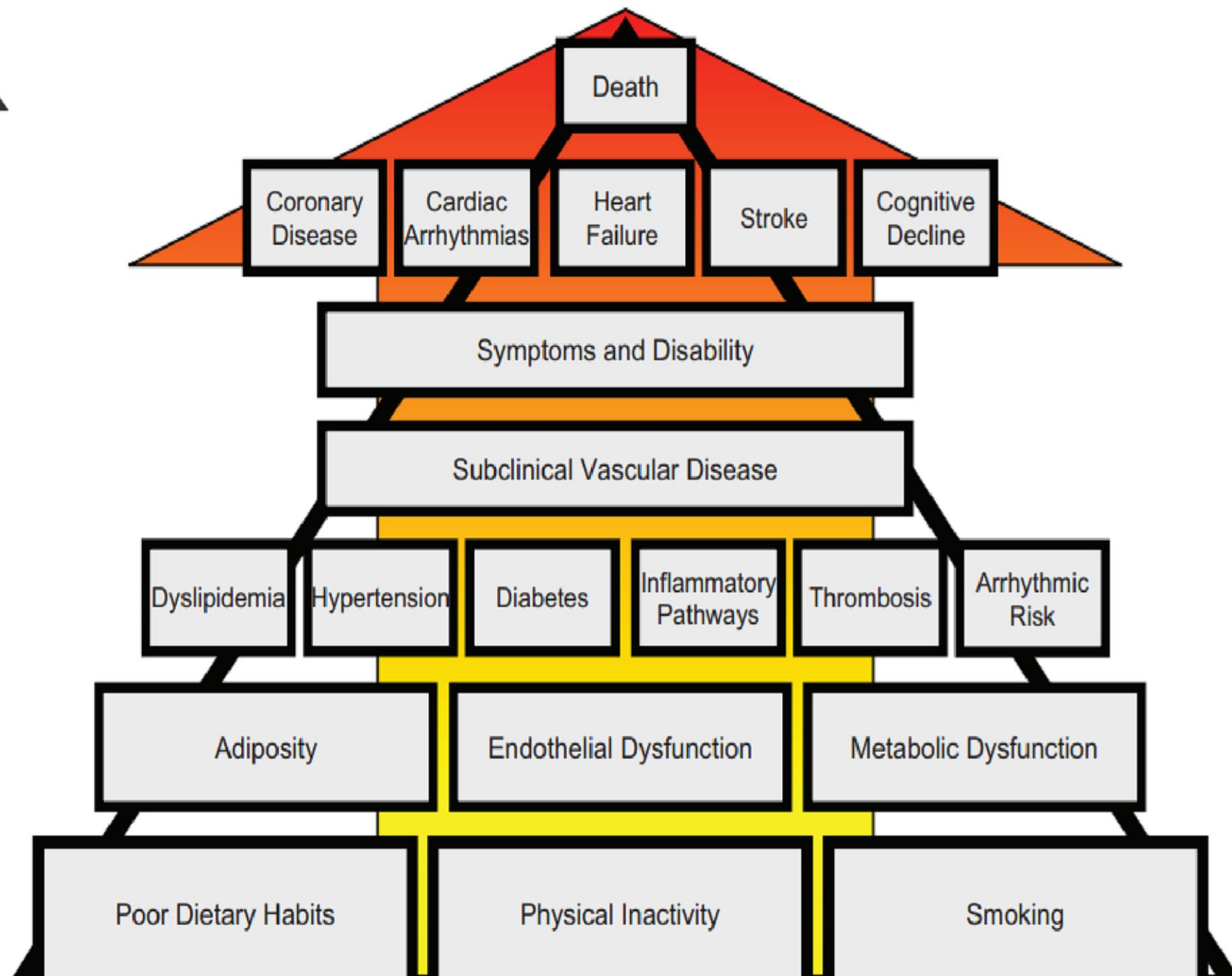


LIFESTYLE CHANGE AS FIRST TREATMENT OPTION

**Clinical
Endpoints**

**Established
and Novel
Risk
Factors**

**Lifestyle
Risk
Factors**



AHA's “Essential 8”

American Heart Association evolving framework for primary and primordial prevention



LIFESTYLE BEHAVIORAL COUNSELING

- The US Preventive Services Task Force – grade **A** and **B** recommendations for lifestyle behavioral counseling for a variety of conditions
 - Cardiovascular Disease Prevention in Adults With Cardiovascular Risk Factors*
 - Healthy Weight and Weight Gain In Pregnancy
 - Weight Loss to Prevent Obesity-Related Morbidity and Mortality in Adults
 - Obesity in Children and Adolescents
 - Prediabetes and Type 2 Diabetes
 - Tobacco Smoking Cessation in Adults Including Pregnant Persons
 - Tobacco Use Prevention in Children and Adolescents
 - Perinatal Depression: Preventive Intervention
 - Unhealthy Alcohol Use in Adolescents and Adults
 - Unhealthy Drug Use
 - Falls Prevention in Community-Dwelling Older Adults
 - Breastfeeding

*Update is currently in progress



2013 ACC/AHA/TOS and 2016 AACE/ACE Guidelines for the Management of Overweight and Obesity in Adults

TABLE 2. Diagnosis and Medical Management of Adult Patients With Obesity: AACE/ACE Framework³

Diagnosis		Staging and treatment	
BMI, ^a kg/m ²	Clinical component ^b	Disease stage	Suggested therapy (based on clinical judgment)
Anthropometric component			
< 25 < 23 in patients of certain ethnicities; waist circumference below regional/ethnic cutoffs	Evaluate for presence or absence of adiposity-related complications and severity of complications <ul style="list-style-type: none"> • Metabolic syndrome • Prediabetes • Type 2 diabetes • Dyslipidemia • Hypertension • Cardiovascular disease • Nonalcoholic fatty liver disease • Polycystic ovary syndrome • Infertility (women) • Hypogonadism (men) • Obstructive sleep apnea • Asthma/reactive airway disease • Osteoarthritis • Urinary stress incontinence • Gastroesophageal reflux disease • Mental depression 	Normal weight (no obesity)	<ul style="list-style-type: none"> • Healthy lifestyle: Healthy meal plan/physical activity
25–29.9 23–24.9 in patients of certain ethnicities		Overweight stage 0 (no complications)	<ul style="list-style-type: none"> • Lifestyle therapy: Reduced-calorie healthy meal plan/physical activity/behavioral interventions
≥ 30 ≥ 25 in patients of certain ethnicities		Obesity stage 0 (no complications)	<ul style="list-style-type: none"> • Lifestyle therapy: Reduced-calorie healthy meal plan/physical activity/behavioral interventions • Anti-obesity medications^c: Consider if lifestyle therapy fails to prevent progressive weight gain (BMI ≥ 27)
≥ 25 ≥ 23 in patients of certain ethnicities		Obesity stage 1 ^d (1 or more mild to moderate complications)	<ul style="list-style-type: none"> • Lifestyle therapy: Reduced-calorie healthy meal plan/physical activity/behavioral interventions • Anti-obesity medications^c: Consider if lifestyle therapy fails to achieve therapeutic target or initiate concurrently with lifestyle therapy (BMI ≥ 27)
≥ 25 ≥ 23 in patients of certain ethnicities		Obesity stage 2 ^d (at least 1 severe complication)	<ul style="list-style-type: none"> • Lifestyle therapy: Reduced-calorie healthy meal plan/physical activity/behavioral interventions • Add anti-obesity medication^c: Initiate concurrently with lifestyle therapy (BMI ≥ 27) Consider bariatric surgery: (BMI ≥ 35)

AACE, American Association of Clinical Endocrinology; ACE, American College of Endocrinology; BMI, body mass index.

^aBMI values are not dependent upon age or sex. However, values may not correspond to the same amount of adiposity in different populations (including certain ethnic groups).

^bStaging of a complication as mild, moderate, or severe is based on criteria specific to each particular complication.

^cThe 2016 guideline uses the term "weight-loss medications." "Anti-obesity medications" is now preferred.

^dNote that a diagnosis of obesity stage 1 or stage 2 may be given to an individual classified as overweight by BMI but who has weight-related complications.

Reprinted from Endocrine Practice, Vol22/Suppl3, Garvey WT, Mechanick JL, Brett EM, et al; Reviewers of the AACE/ACE Obesity Clinical Practice Guidelines, American Association of Clinical Endocrinologists and American College of Endocrinology comprehensive clinical practice guidelines for medical care of patients with obesity, Pages No. 1–203, Copyright (2016), with permission from Elsevier.

LIFESTYLE MEDICINE ENHANCES MANY TREATMENTS

- Surgery Readiness
 - Orthopedic Surgery
 - Bariatric Surgery
 - Heart Surgery
- Medications for Various Conditions
- Wound Care





AMERICAN COLLEGE OF
Lifestyle Medicine

QUINTUPLE AIM

LIFESTYLE MEDICINE ACHIEVES THE QUINTUPLE AIM





LIFESTYLE MEDICINE = GREATER HEALTH BENEFITS

Improvements in:

- ☐ Hypertension
- ☐ Blood lipids
- ☐ BMI
- ☐ Heart disease
- ☐ Mental health
- ☐ Depression

Reduced risk of:

- ☐ Alzheimer's disease
- ☐ Musculoskeletal conditions
- ☐ Certain forms of cancer

Reversal of:

- ☐ Coronary artery disease (CAD)

Remission of:

- ☐ Type 2 diabetes
- ☐ Metabolic dysfunction-associated steatotic liver disease (MASLD)



RE-ENVISIONING CLINICAL OUTCOMES

- Health Restoration
 - Disease Remission
 - Medication De-escalation





AMERICAN COLLEGE OF
Lifestyle Medicine

THE AMERICAN COLLEGE OF LIFESTYLE MEDICINE

Overview of Lifestyle Medicine



WHO WE ARE

Our Mission

Advancing evidenced-based lifestyle medicine to treat, reverse, and prevent non-communicable, chronic disease

Our Vision

A world wherein lifestyle medicine is the foundation of health and all healthcare





EDUCATE, EQUIP, EMPOWER

ACLM provides physicians and health professionals the support, education and certification to treat, reverse and prevent chronic disease by addressing the root causes with evidence-based therapies in lifestyle behaviors such as optimal nutrition, physical activity, social connectedness, avoidance of risky substances, restorative sleep and stress management.



CERTIFICATION



Demonstrate your knowledge related to implementing therapeutic lifestyle interventions in clinical practice:

*Join over **8,000** physicians and clinicians globally who have become Diplomates of ABLM/IBLM/ACLM.*



[Learn More](#)



LIFESTYLE MEDICINE ASSESSMENT TOOLS

Lifestyle Medicine Short Assessment Form



The following questions comprise the core metrics we propose using to capture readiness, willingness and confidence to change, as well as health behaviors that are aligned with the six pillars of lifestyle medicine. This assessment tool was adapted from the original Loma Linda University/American College of Lifestyle Medicine short form published in 2019 and updated in 2024.

Readiness, Willingness, and Confidence to Change

On a scale of 1-10, with 1 being least and 10 being most, how ready do you feel to make lifestyle changes to improve your health?

0 1 2 3 4 5 6 7 8 9 10
Not Ready Somewhat Ready Very Ready

On a scale of 1-10, with 1 being least and 10 being most, how willing are you to make lifestyle changes to improve your health?

0 1 2 3 4 5 6 7 8 9 10
Not Willing Somewhat Willing Very Willing

On a scale of 1-10, with 1 being least and 10 being most, how confident are you to make lifestyle changes to improve your health?

0 1 2 3 4 5 6 7 8 9 10
Not Confident Somewhat Confident Very Confident

Motivation

Please rank the top 3 areas you are most motivated to change in order to improve your current overall LEVEL OF HEALTH (1 being most motivated).

___ Avoidance of Risky Substances ___ Sleep
___ Nutrition ___ Social Connectedness
___ Physical Activity ___ Stress Management

Nutrition: ACLM Diet Screener 9

This brief questionnaire will ask about your usual diet over the last 4 weeks. Please try to answer as accurately as possible – there are no right or wrong answers. Your best guess is better than leaving a blank. It's ok if something that you eat falls into more than one category.

Over the last 4 weeks, how often did you eat or drink the following items?

ACLM Diet Screener V1



NUTRITION IN ACTION







Instructions

This brief questionnaire will ask about your **usual diet over the last 4 weeks**. Please try to answer as accurately as possible – there are no right or wrong answers. A guess is better than leaving a blank.

Please **consider what you have typically eaten over the last 4 weeks** when answering the following questions.

You may need to answer "yes" multiple times for the same food, such as smoothies, which may include fruits, nuts, or other ingredients, or lasagna, which may include pasta, meat, vegetables, tomato sauce, cheese, added salt, and added fats/oils. It's okay to answer yes to more than one question for the same food because the questions capture different aspects of the foods.

Over the last four weeks, how often did you eat or drink the following items?

		Never	Less than 1x/week	1-3x/week	4-6x/week	1-2x/day	More than 3x/day
 Fruit	EXAMPLES						
	apples, bananas, pears, Asian pears, oranges, tangerines, or other citrus fruit, peaches, plums, cherries or other stonefruit, melons, grapes, strawberries, blueberries, blackberries, chokeberries, or other berries, jack fruit, guava, kiwi, watermelon, breadfruit, papaya, prickly pear, passionfruit, custard apple, pineapple, plantains, pomegranate, mangos, durian, lychee, starfruit, or any other tropical fruit, dried fruit, or any other fruit (do not include avocado)						
 Leafy green vegetables	EXAMPLES						
	cooked and raw leafy greens such as lettuce or romaine, spinach, kale, collards, chard, Chinese broccoli, beet greens, arugula, parsley, purslane, sorrel, cilantro, ramps, sochan, tat soi, bok choy, cabbage, napa cabbage, mustard greens, moringa, amaranth leaves, fenugreek leaves, drumstick leaves, watercress, micro-greens, any kind of sprouts, seaweed, or any other leafy green vegetables or dishes made with them						
 Other vegetables or vegetable dishes	EXAMPLES						
	asparagus, cucumbers, tomatoes, root vegetables such as potatoes, sweet potatoes or yams, taro, carrots, jicama, or daikon, broccoli, bamboo shoots, cauliflower, celery, onions, garlic, ginger, beets, green plantain, green beans, green peas, cactus, snowpeas, sugar snap peas, bean sprouts, bell peppers, eggplant, lotus roots, okra, water chestnuts, mushrooms, zucchini, squash or gourd, winter melon, pumpkin, yuca, or any other vegetables or dishes made from them						
 Whole grains or whole grain products	EXAMPLES						
	any kind of brown, black, purple, or red rice, quinoa, millet, barley, bulgur, buckwheat, wheat berries, millet, corn, maize, or polenta, grits, tamales, sorghum, amaranth, oat groats, farro, steel-cut oats, or thick-rolled oats, teff, 100% whole grain bread, tortillas, roti, or whole grain pasta/noodles, waffles, pancakes, muffins, baked goods, instant or quick-cooking oats, or whole grain ready-to-eat cereal, or any other 100% whole grain products.						

Access Version 1 ACLM Diet Screener documents at <https://lifestylemedicine.org/dietscreener>





THANK YOU

Visit lifestylemedicine.org for more information

